

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for detecting behavioral patterns related to the financial health of a business entity, comprising:

a computing device having a processor that executes at least one data collection application to extract financial data and business data that relates to the business entity from at least one data source,

wherein the financial data comprises:

(i) quantitative financial data comprising financial numerical data, and

(ii) qualitative financial data comprising financial narrative data representing events that financially affect the business entity,

and wherein the business data comprises:

(i) quantitative business data comprising non-financial numerical data, and

(ii) qualitative business data comprising non-financial narrative data representing events related to management and organization associated with the business entity;

and wherein the data collection application utilizes event detection and natural language processing to extract the narrative data for the qualitative financial data and the qualitative business data; and

the processor performing analytics on the financial data and the business data via an analytics engine residing on the computing device as programming instructions and configured to perform analytics on the financial data and business data, wherein the analytics engine is configured to:

(a) analyze quantitative data comprising the quantitative financial data and quantitative business data using a financial anomaly detection technique to detect the behavioral patterns associated with the business entity with respect to quantitative data;

(b) analyze qualitative data comprising the qualitative financial data and qualitative business data using the financial anomaly detection technique to detect the behavioral patterns associated with the business entity with respect to qualitative data; and

(c) evaluate the analyzed quantitative data in combination with and in relation to the analyzed qualitative data using a reasoning methodology that incorporates temporal relationships and confidence levels to substantiate the detected behavioral patterns in relation to each other.

2. (Canceled)

3. (Canceled)

4. (Original) The system of claim 1, wherein the data source comprises at least one of quantitative business and financial information sources and qualitative business and financial information sources.

5. (Original) The system of claim 1, wherein the behavioral patterns comprises at least one of likelihood of fraud, financial credit or investment risk and good credit or investment prospect associated with the business entity.

6. (Original) The system of claim 1, wherein the data collection application comprises at least one of quantitative data collection applications and qualitative data collection applications.

7. (Original) The system of claim 6, wherein the quantitative data collection applications comprise commercial database data extraction tools and financial data extraction tools.

8. (Original) The system of claim 7, wherein the financial data extraction tools are configured to extract financial data and financial measures from the quantitative financial data and quantitative business data.

9. (Original) The system of claim 6, wherein the qualitative data collection applications comprise event detection and natural language processing tools.

10. (Original) The system of claim 9, wherein the event detection and natural language processing tools are configured to extract keywords and text patterns from the qualitative financial data and qualitative business data.

11. (Original) The system of claim 1, wherein the financial anomaly detection technique comprises at least one of outlier detection, trend analysis, correlation analysis, regression and factor and cluster analysis.
12. (Original) The system of claim 1, wherein the financial anomaly detection technique detects the behavioral patterns based on an analysis of at least one of past financial measures related to the business entity, past financial measures related to at least one industrial segment associated with the business entity and current financial measures related to at least one industrial segment associated with the business entity.
13. (Canceled).
14. (Original) The system of claim 1, wherein the analytics engine is further configured to generate an alert signal, wherein the alert signal comprises at least one of a visual representation and textual representation of the detected behavioral patterns.
15. (Currently Amended) A method for detecting behavioral patterns related to the financial health of a business entity, comprising:
extracting financial data and business data that relates to the business entity from at least one data source,
wherein the financial data comprises
(i) quantitative financial data comprising financial numerical data, and
(ii) qualitative financial data comprising financial narrative data representing events that financially affect the business entity,
and wherein the business data comprises:
(i) quantitative business data comprising non-financial numerical data, and
(ii) qualitative business data comprising non-financial narrative data representing events related to management and organization associated with the business entity;
and wherein extraction comprises utilizing event detection and natural language processing to extract the financial narrative data and the non-financial narrative data; and

analyzing quantitative data comprising the quantitative financial data and quantitative business data using a financial anomaly detection program to detect behavioral patterns associated with the business entity with respect to quantitative data, wherein said program is executed by a processor;

analyzing qualitative data comprising the qualitative financial data and qualitative business data using the financial anomaly detection program to detect behavioral patterns associated with the business entity with respect to qualitative data, wherein said program is executed by the processor; and

evaluating the analyzed quantitative data in combination with and in relation to the analyzed qualitative data using a reasoning methodology that incorporates temporal relationships and confidence levels to substantiate the detected behavioral patterns in relation to each other.

16. (Canceled)

17. (Canceled)

18. (Original) The method of claim 15, wherein the data source comprises at least one of quantitative business and financial information sources and qualitative business and financial information sources.

19. (Original) The method of claim 15, wherein the behavioral patterns comprise at least one of likelihood of fraud, financial credit or investment risk and good credit or investment prospect associated with the business entity.

20. (Original) The method of claim 15, wherein the extracting further comprises extracting quantitative financial data and quantitative business data and extracting qualitative financial data and qualitative business data that relates to the business entity.

21. (Original) The method of claim 20, wherein extracting quantitative financial data and quantitative business data further comprises extracting financial data and financial measures from the quantitative financial data and quantitative business data.

22. (Original) The method of claim 20, wherein extracting qualitative financial data and qualitative business data further comprises extracting keywords and text patterns from the qualitative financial data and qualitative business data.
23. (Original) The method of claim 15, wherein the financial anomaly detection technique detects the behavioral patterns based on an analysis of at least one of past financial measures related to the business entity, past financial measures related to at least one industrial segment associated with the business entity and current financial measures related to at least one industrial segment associated with the business entity.
24. (Canceled).
25. (Original) The method of claim 15, further comprises generating an alert signal, wherein the alert signal comprises at least one of a visual representation and textual representation of the detected behavioral patterns.
26. (Currently Amended) A computer-readable medium storing computer instructions for instructing a computer system to detect behavioral patterns related to the financial health associated with a business entity, the computer instructions comprising:
- (a) extracting financial data and business data that relates to the business entity from at least one data source, wherein the financial data comprises quantitative financial data and qualitative financial data, and wherein the business data comprises quantitative business data and qualitative business data,
 - wherein said quantitative financial data comprises financial numerical data, and
 - wherein said quantitative business data comprises numerical non-financial numerical data related to finances of the business entity, and
 - wherein said qualitative financial data comprises financial narrative data representing events that financially affect the business entity, and

qualitative business data comprises non-financial narrative data representing events related to management and organization associated with ~~verbal or narrative data related to actions or occurrences associated~~ the business entity;

and wherein extraction comprises utilizing event detection and natural language processing to extract the financial narrative data and the non-financial narrative data,

(b) analyzing quantitative data comprising the quantitative financial data and quantitative business data using a financial anomaly detection program residing on said computer-readable medium to detect the behavioral patterns associated with the business entity with respect to quantitative data; and

(c) analyzing qualitative data comprising the qualitative financial data and qualitative business data using the financial anomaly detection program residing on said computer-readable medium to detect the behavioral patterns associated with the business entity with respect to qualitative data; and

(d) evaluating the analyzed quantitative data in combination with and in relation to the analyzed qualitative data using a reasoning methodology that incorporates temporal relationships and confidence levels to substantiate the detected behavioral patterns in relation to each other.

27. (Canceled)

28. (Canceled)

29. (Original) The computer-readable medium of claim 26, wherein the extracting comprises instructions for extracting quantitative financial data and quantitative business data and extracting qualitative financial data and qualitative business data that relates to the business entity.

30. (Original) The computer-readable medium of claim 26, wherein the financial anomaly detection technique detects the behavioral patterns based on an analysis of at least one of past financial measures related to the business entity, past financial measures related to at least one industrial segment associated with the business entity and current financial measures related to at least one industrial segment associated with the business entity.

31. (Canceled).

32. (Original) The computer readable medium of claim 26 further comprises instructions for generating an alert signal, wherein the alert signal comprises at least one of a visual representation and textual representation of the detected behavioral patterns.

33. (Currently Amended) A method for detecting behavioral patterns related to the financial health of a business entity, comprising:

(a) extracting financial data and business data that relates to the business entity from at least one data source, wherein the financial data comprises quantitative financial data and qualitative financial data, and wherein the business data comprises quantitative business data and qualitative business data;

wherein the financial data comprises:

(i) quantitative financial data comprising financial numerical data, and

(ii) qualitative financial data comprising financial narrative data representing events that financially affect the business entity,

and wherein the business data comprises:

(i) quantitative business data comprising non-financial numerical data, and

(ii) qualitative business data comprising non-financial narrative data representing events related to management and organization associated with the business entity;

and wherein the data collection application utilizes event detection and natural language processing to extract the narrative data for the qualitative financial data and the qualitative business data; and

(b) analyzing quantitative data comprising the quantitative financial data and quantitative business data using a financial anomaly detection program residing on a processor to detect the behavioral patterns associated with the business entity with respect to quantitative data;

(c) analyzing qualitative data comprising the qualitative financial data and qualitative business data using the financial anomaly detection program residing on the processor to detect the behavioral patterns associated with the business entity with respect to qualitative data;

wherein the financial anomaly detection program detects the behavioral patterns based on an analysis of at least one of past financial measures related to the business entity, past financial measures related to at least one industrial segment associated with the business entity and current financial measures related to at least one industrial segment associated with the business entity; and

(d) evaluating by the processor the analyzed quantitative data in combination with and in relation to the analyzed qualitative data using a reasoning methodology that incorporates at least one of temporal relationships, interactions, and confidence levels to substantiate the detected behavioral patterns in relation to each other

34. (Currently Amended) A method for detecting behavioral patterns related to the financial health of a business entity, comprising:

(a) extracting financial data and business data that relates to the business entity from at least one data source, ~~wherein the financial data comprises quantitative financial data and qualitative financial data, and wherein the business data comprises quantitative business data and qualitative business data;~~

wherein the financial data comprises:

(i) quantitative financial data comprising financial numerical data, and

(ii) qualitative financial data comprising financial narrative data representing events that financially affect the business entity,

and wherein the business data comprises:

(i) quantitative business data comprising non-financial numerical data, and

(ii) qualitative business data comprising non-financial narrative data representing events related to management and organization associated with the business entity;

and wherein the data collection application utilizes event detection and natural language processing to extract the narrative data for the qualitative financial data and the qualitative business data; and

(b) analyzing quantitative data comprising the quantitative financial data and quantitative business data using a financial anomaly detection algorithm residing on a processor

to detect the behavioral patterns associated with the business entity with respect to quantitative data;

(c) analyzing qualitative data comprising the qualitative financial data and qualitative business data using the financial anomaly detection algorithm residing on the processor to detect the behavioral patterns associated with the business entity, wherein the financial anomaly detection technique detects the behavioral patterns with respect to qualitative data based on an analysis of at least one of past financial measures related to the business entity, past financial measures related to at least one industrial segment associated with the business entity and current financial measures related to at least one industrial segment associated with the business entity; and

(d) evaluating by the processor the analyzed quantitative data in combination with and in relation to the analyzed qualitative data using a reasoning methodology to substantiate the detected behavioral patterns in relation to each other.